



Training Opportunity “2006 International Code Training Academy” **Course Syllabus** Aug 2006 through June 2007



The "I" Code Academy jointly offered by the City of San Diego and the San Diego Area Chapter of ICC to City of San Diego staff (all departments) and members of the SD Area chapter as well as members of the local design, construction and inspection community. The series of 10 classes are being offered over a 10 month period with the same class offered three times on consecutive days. These classes are offered at a substantial discount to the regular rate charged by ICC. You may select the classes you choose to attend. All classes are taught by professional trainers from ICC and are based on the soon to be adopted 2006 IBC and IFC.

- A. **The Fundamentals Series** include one-day (6 contact hours/0.6 CEUs) seminars that overview the basic provisions of a specific I-Code.

Focused on entry-level concepts, the Fundamentals are invaluable to those new to or unfamiliar with building, construction and fire safety regulations or the International Codes.

Professional code educators outline the location and intent of key provisions and definitions in a specific I-Code through lecture, question & answer sessions, and practice exercises.

- B. **The Performing Series** include multi-day seminars (12 or 18 contact hours/1.2 or 1.8 CEUs) that focus on "how-to" apply the codes. This series includes residential and commercial inspection and plan review seminars.

Inspection focused seminars provide details on performing specific building, mechanical, plumbing, fire and electrical inspections. Plan review seminars detail performing structural, nonstructural and residential plan reviews.

Appropriate for those with an entry- to intermediate-level of code knowledge and on-the-job experience. Seminars in this series can also serve as a best practices guide or refresher for seasoned practitioners.

Nationally recognized practitioners explain how-to perform a specific inspection or plan review in a step-by-step fashion.

Performing series seminars feature interactive practice exercises, question and answer sessions, detailed checklists and other valuable job aids.

- C. **The Special Topics Series** include single-day and multi-day seminars (6 or 12 contact hours/0.6 or 1.2 CEUS) that provide a close examination of specific code subjects.

This series of seminars build on the Fundamentals and Performing series of seminars. Special Topics seminars are best suited for design, building, fire and other professionals with an intermediate- to advanced-level of code knowledge and on-the-job experience.

Seminars are delivered by select industry professionals with a proven record of delivering effective training with lasting impact.

Accessibility, building planning, nonstructural fire and life safety, hazardous materials, means of egress and architectural applications are just a few of the many topics covered within in this special interests series of seminars.

1. **2006 IBC Transition from the 1997 UBC**

1 Day (ICC CEU Credit: 0.6)

RHC Aug 22, 23, 24 2006

Course Description:

This seminar focuses on helping users that are familiar with the 1997 UBC adapting to the 2006 IBC. The information in this course details the differences between the two codes and covers concepts that are not in the 1997 UBC. Also, some of the codes in the UBC and IBC are the same, but located in different sections. This seminar covers this information as well. In an effort to further aid users, an explanation as to why the codes differ is provided as well.

Objectives:

Upon completion, participants will be better able to:

- Identify the important differences between the 2006 IBC and the 1997 UBC,
- Identify information that has not changed in the two codes, but has been relocated.
- Identify and explain the concepts that are in the 2006 IBC but were absent from the 1997 UBC.

2. **2006 IBC Nonstructural Fire and Life Safety Principles**

2 Day (ICC CEU Credit: 0.6)

NTC Sept 6-7, 11-12, 13-14 2006

Course Description:

- ✍ Addresses the critical concepts of the IBC regarding fire and life safety issues. These concepts provide a basis for the correct use of the code in building planning, classification of buildings and occupancies, fire-resistance-rated construction, fire protection systems and means of egress.
- ✍ Discusses issues that are the bases for many designs and plan review decisions. Provides content on the 2006 IBC Region 10.

Objectives:

Upon completion, participants will be better able to:

- Classify occupancy groups and requirements.
- Calculate actual and allowable floor area.
- Determine the type of construction of a proposed building.
- Determine required fire-resistance-rated construction.
- Identify the type of fire protection required.
- Calculate occupant load relating to means of egress.
- Determine required means of egress capacity.
- Describe each of the three parts of a means of egress system. Identify the important differences between the 2006 IBC and the 1997 UBC,
- Identify information that has not changed in the two codes, but has been relocated.
- Identify and explain the concepts that are in the 2006 IBC but were absent from the 1997 UBC.

3. 2006 IBC Fundamentals - Structural Provisions

1 Day (ICC CEU Credit: 0.6)

RHC Oct 10, 11, 12 2006

Course Description:

- ✍ Examines structural provision requirements of the IBC.
- ✍ Addresses major elements including structural design, structural tests and special inspections, soils and foundations, concrete, masonry, steel and wood.

Objectives:

Upon completion, participants will be better able to:

- Discuss administrative requirements pertaining to structural provisions.
- Identify definitions associated with structural provisions.
- Discuss structural design requirements.
- Describe structural tests and special inspections requirements.
- Discuss soils and foundation requirements for constructing buildings.
- Discuss requirements of structural materials used in the construction of buildings or structural components.

4. 2006 IBC Fundamentals - Nonstructural Provisions

1 Day (ICC CEU Credit: 0.6)

RHC Nov 7, 8, 9 2006

Course Description:

Addresses the critical concepts of the IBC regarding nonstructural requirements. Provides a basis for the correct use of the code in building planning, fire-resistance-rated construction, fire protection systems and means of egress. Discusses issues that are the bases for many designs and plan review decisions.

Objectives:

Upon completion, participants will be better able to:

- Locate general topic (chapters) in the 2006 IBC.
- Locate specific tables in the 2006 IBC for applicable situations.
- Apply code requirements to real world situations.
- Discuss the intent behind a given code requirement.
- Interpret requirements for a scenario as compliant or noncompliant.

5. 2006 IFC Fundamentals 1 Day

(ICC CEU Credit: 0.6)

RHC Dec 12, 13, 14 2006

Course Description:

The purpose of this seminar is to familiarize and assist code officials in locating, describing and applying applicable code requirements of the IFC to determine compliance or noncompliance.

Objectives:

Upon completion, participants will be better able to:

- Explain the importance and benefits of the fire inspection.
- Describe the four types of commercial fire inspections.
- Demonstrate effective verbal, written, and non-verbal communication skills during all phases of the commercial fire inspection process.
- Identify the occupancy type of a building.
- List the five types of construction.
- Perform a commercial fire inspection for each occupancy type.
- Conduct research to identify applicable code or standards given a fire and/or life safety issue.

6. 2006 IBC Building Planning 1 Day

(ICC CEU Credit: 0.6)

MOC II Jan 9, 10, 11 2007

Course Description:

Introduces choices in building classification, materials, fire resistance, fire protection and means of egress for design, plan review and inspection of basic building projects in order to achieve compliance.

Objectives:

Upon completion, participants will be better able to:

- Identify and describe the occupancy groups found in the 2006 IBC.
- Utilize Table 503 to determine the type of construction based on height and area.
- Apply modifications to building height and area based on exceptions and allowable increase.

7. **2006 IBC Hazardous Materials 1 Day**

(ICC CEU Credit: 0.6)

MOC II Feb 13, 14, 15 2007

Course Description:

Describes and applies the code requirements in the 2006 IBC (specifically Chapters 3 and 4) and the 2006 IFC to determine compliance for hazardous materials.

Objectives:

Upon completion, participants will be better able to:

- Identify and describe the occupancy groups found in the 2006 IBC.
- Utilize Table 503 to determine the type of construction based on height and area.
- Apply modifications to building height and area based on exceptions and allowable increase.

8. **2006 IBC Solving Means of Egress Issues in Commercial Buildings 1 Day**

(ICC CEU Credit: 0.6)

MOC II March 13, 14, 15 2007

Course Description:

Designed to provide knowledge of requirements for means of egress including practice solving problems from a set of plans for a 4-story commercial building related to each egress issue.

Objectives:

Upon completion, participants will be better able to:

- List and describe each of the 3 parts of a means of egress
- Identify the 7 fundamental means of egress design issues
- Calculate occupant load and determine required means of egress capacity
- Determine required number of exits - Determine requirements for arrangement means of egress facilities, including:
 - Remote location of doors and exits
 - Exit access travel distance
 - Common paths of travel
 - Egress through adjoining spaces
- Determine the requirements for fire resistance rated construction for egress elements, including corridors, stairway and exit enclosures, lobbies, vestibules, areas of refuge, and horizontal exits.
- Determine the requirements for design of egress elements, including corridors, stairway and exit enclosures, lobbies, vestibules, areas of refuge, and horizontal exits.
- Determine requirements for door hardware, including panic hardware, door latching devices, door opening, and requirements for power-operated doors.
- Determine requirements for locations and amounts of means of egress lighting and signage.
- Evaluate the adequacy of a horizontal exit as part of a means of egress plan.
- Evaluate the means of egress in assembly spaces

- Determine requirements for exit access widths in smoke-protected assembly seating
- Evaluate the adequacy of accessible means of egress.

9. **2006 IBC Special Uses and Mixed Occupancies 1 Day**

(ICC CEU Credit: 0.6)

MOC II April 10, 11, 12 2007

Course Description:

Provides an overview and application of code requirements for mixed occupancies, hazardous materials, unlimited area occupancies, covered malls and high-rise buildings. Utilizes drawings and examples to illustrate complex design and inspection topics.

Objectives:

Upon completion, participants will be better able to:

- Determine if a building or structure should be fire-separated between mixed occupancies.
- Determine the degree of fire separation required between buildings of mixed occupancies.
- Determine applicability of fire suppression requirements.
- Identify applicability of factors, such as type of occupancy and occupancy group; exceptions regarding height, fire safety requirements, and means of egress.
- Determine the fire resistance rating and extent of tenant separations.
- Determine allowable travel distances within tenant spaces and within the mall.
- Determine the applicability of smoke control system requirements.
- Determine if code requirements are applicable to a specific building.
- Determine what design alternatives are permitted based in the fire protection features.
- Determine whether code requirements for the alarm system and standby power have been met. List and describe each of the 3 parts of a means of egress

10. **2006 IFC Fire Protection Systems 1 Day**

(ICC CEU Credit: 0.6)

MOC II May 8, 9, 10 2007

Course Description:

Provides basic knowledge of the fire protection systems code requirements as contained in the 2006 IFC and IBC. Addresses the IFC requirements relating to fire-protection systems, including them most common types of automatic sprinkler systems, alternative automatic extinguishing systems and standpipe systems. Overviews types of fire alarm and detection systems and smoke control systems is provided. Discusses additional means to assist or enhance the fixed fire protection systems, such as portable fire extinguishers.

Objectives:

Upon completion, participants will be better able to:

- Define key terms.
- Determine where and when fire protection systems are required.
- Understand the principles of how a fire protection system detects a fire, alerts occupants and/or the fire department controls smoke and controls or extinguishes fire.
- Describe why a fire protection system must conform to code criteria and referenced standards.

I:\DB&S-Research\Training\I Code Academy 06-07\2006 International Code Training Academy Syllabus.doc
7/6/2006 4:19:06 PM